

FIG. 2

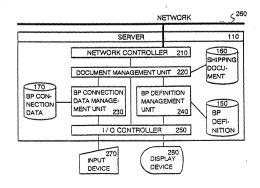


FIG. 3

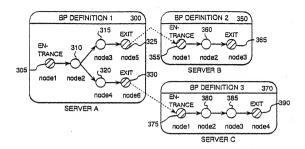


FIG. 4

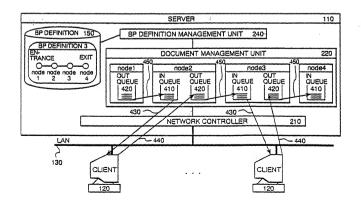


FIG. 5

PREVIOUS BP EXIT LOCATION 510		NEXT BP ENTRANCE LOCATION		
BP DEFINITION EXIT NODE NAME NAME 511 512		BP DEFINITION NAME 521	ENTRANCE NODE NAME 522	SERVER NAME 523
BP DEFINITION 1	node 5	BP DEFINITION 2	node 1	SERVER B
BP DEFINITION 1	node 6	BP DEFINITION 3	node 1	SERVER C

500 BP CONNECTION TABLE

# FIG. 6

1	REVIOUS BP EXI	T LOCATION 620	NEXT BP	PREVIOUS BP E	KIT LOCATION 620
1	P DEFINITION AME 621	SERVER NAME 622		BP DEFINITION NAME 621	SERVER NAME 622
BP DEFINITION 2 BE	P DEFINITION 1	SERVER A	BP DEFINITION 3	BP DEFINITION 1	SERVER A
				• • •	• • •

600 SECURITY TABLE (a)

0 SECURITY TABLE ( b )

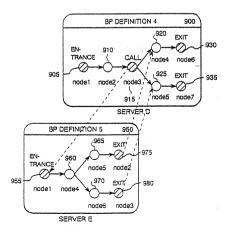
PREVIOUS SERVER		NEXT SERVER	
	-		
DOCUMENT MANAGEMENT UNIT CALLS OUT A RETRIEVAL FUNCTION IN THE BP CONNECTION DATA MANAGEMENT UNIT BY GIVING THE CURRENT BP DEFINITION NAME AND THE EXIT NODE NAME AS PARAMETERS	705	NETWORK CONTROLLER CALLS OUT A START- IN FUNCTION IN THE DOCUMENT MANAGEMENT UNIT BY THE DELIVERED SHIPPING DOCUMENT AS A PARAMETER	735 J
	:	DOCUMENT MANAGEMENT UNIT TAKES OUT	1
BP CONNECTION DATA MANAGEMENT UNIT RETRIEVES A BP CONNECTION TABLE SINTHY, IN WHICH THE PREVIOUS BP EXIT LOCATION HAS THE BP DEFINITION NAME AND THE EXIT NODE NAME OF THE PARAMETERS	710 -J	FROM THE SHIPPING COCUMENT INDICATED IN THE PARAMETER. THE PREVIOUS BP DEF- INITION NAME AND SERVER NAME AND THE NEXT BP DEFINITION NAME	740 ~
	1	DOCUMENT MANAGEMENT UNIT CALLS OUT A	Ī
BP CONNECTION DATA MANAGEMENT UNIT RE- TURNS TO THE DOCUMENT MANAGEMENT UNIT, THE NEXT BP ENTRANCE LOCATION IN THE RE- TRIEVED BP CONNECTION TABLE ENTRY	715 -J	TEST FUNCTION IN THE BP CONNECTION DATA MANAGEMENT UNIT, BY GIVING THE PREVIOUS BP DEFINITION NAME AND SERVER NAME, AND THE NEXT BP DEFINITION NAME	745 ~
DOCUMENT MANAGEMENT UNIT SETS THE RE-	1	BP CONNECTION DATA MANAGEMENT RE-	ī
TRIEVED NEXT BP ENTRANCE LOCATION IN THE SHIPPING DOCUMENT AS A NEXT BP ENTRANCE LOCATION	720 ~J	TRIEVES A SECURITY TABLE ENTRY IN WHICH THE PREVIOUS BP EXIT LOCATION AND THE NEXT BP DEFINITION NAME HAS THE PREVIOUS	750 ~
	.	BP DEFINITION NAME AND SERVER NAME, AND	
DOCUMENT MANAGEMENT UNIT CALLS OUT A DELIVERY FUNCTION IN THE NETWORK CON-	725 J	THE NEXT BP DEFINITION NAME OF THE PA- RAMETERS	
TROL UNIT BY GIVING THE SHIPPING DOCU-		BP CONNECTION DATA MANAGEMENT UNIT	1
MENT AS A PARAMETER	1	RETURNES THE FLAG INDICATING WHETHER	7 <b>5</b> 5
THE NETWORK CONTROLLER DELIVERS THE	]	THERE WAS AN ENTRY TO THE SECURITY	
SHIPPING DOCUMENT TO THE SERVER MAN- AGING A NEXT BP CONFIRRING THE NEXT BP ENTRANCE LOCATION IN THE SHIPPING DOC- UMENT INDICATED BY THE PARAMETER	730 J	THE DOCUMENT MANAGEMENT UNIT ENTERS THE SHIPPING DOCUMENT INDICATED BY THE PARAMETER, INTO THE IN QUEUE OF THE EN- TRANCE NODE IN THE 8P DEFINITION INDICA- TED BY THE NEXT BP ENTRANCE LOCATION WHEN THE FLAG IS "YES", AND EXECUTES	760
		THE PROCESS FOR BP CONNECTION ERROR. WHEN THE FLAG IS "NO"	1

FIG. 8

PREVIOUS BP EXIT LOCATION 810	SERVER NAME	811
	BP DEFINITION NAME	812
	EXIT NODE NAME	813
NEXT BP	SERVER NAME	821
ENTRANCE LOCATION 820	BP DEFINITION NAME	822
	ENTRANCE NODE NAME	823
DOCUMENT DATA		

800 DATA STRUCTURE OF THE SHIPPING DOCUMENT

FIG. 9



PREVIOUS BP EXIT LOCATION 1010		NEXT BP ENTRANCE LOCATION 1			
BP DEFINITION NAME 1011	CALL NODE NAME 1012	BP DEFINITION NAME 1021	ENTRANCE NODE NAME 1022	SERVER NAME 1023	
BP DEFINITION 4	node 3	BP DEFINITION 5	node 1	SERVER E	
			• • •		

1000 BP CONNECTION TABLE

## FIG. 11

PREVIOUS BP EXIT LOCATION 1110		NEXT BP ENTRANCE LOCATION 1120			RETURN NODE
BP DEFINITION NAME 1111	CALL NODE NAME 1112		EXIT NODE NAME 1122	SERVER NAME 1113	NAME IN THE PREVIOUS BP 1130
BP DEFINITION 4	node 3	BP DEFINITION 5	node 2	SERVER E	node 4
BP DEFINITION 4	node 3	BP DEFINITION 5	node 3	SERVER E	node 5

1205

1215

### PREVIOUS SERVER

DOCUMENT MANAGEMENT UNIT PUSHES THE CURRENT BP DEFINITION NAME. CALL NODE NAME AND SERVER NAME INTO THE STACK OF PREVIOUS BPS IN THE SHIPPING DOCUMENT

DOCUMENT MANAGEMENT UNIT CALLS OUT A
RETRIEVAL FUNCTION IN THE 9P CONNECTION
DATA MANAGEMENT UNIT BY GIVING THE CURRENT BP DEFINITION NAME AND CALL NODE
NAME AS PARAMETERS

BP CONNECTION DATA MANAGEMENT UNIT RETRIEVES A BP CONNECTION TABLE ENTRY IN WHICH THE PREVIOUS BP CALL LOCATION HAS THE SAME VALUES AS THE BP DEFINITION NAME AND CALL NODE NAME OF THE PARAME-TERS

BP CONNECTION DATA MANAGEMENT UNIT RE-TURNS TO THE DOCUMENT MANAGEMENT UNIT.

THE NEXT BP ENTRANCE LOCATION IN THE RE-TRIEVED BP CONNECTION TABLE ENTRY

DOCUMENT MANAGEMENT UNIT SETS THE RE-TRIEVED NEXT BP ENTRANCE LOCATION IN THE SHIPPING DOCUMENT AS A NEXT BP ENTRANCE LOCATION

DOCUMENT MANAGEMENT UNIT CALLS OUT A
DELIVERY FUNCTION IN THE NETWORK CONTROL UNIT BY GIVING THE SHIPPING DOCUMENT AS A PARAMETER

THE NETWORK CONTROLLER DELIVERS THE SHIPPING DOCUMENT TO THE SERVER MANAGING A NEXT 3P CONFIRRING THE NEXT 8P ENTRANCE LOCATION IN THE SHIPPING DOCUMENT INDICATED BY THE PARAMETER

#### NEXT SERVER

NETWORK CONTROLLER CALLS OUT A STARTIN FUNCTION IN THE DOCUMENT MANAGEMENT
UNIT BY THE DELIVERED SHIPPING DOCUMENT
AS A PARAMETER

DCCUMENT MANAGEMENT UNIT TAKES OUT
THE NEXT BP ENTRANCE LOCATION FROM
THE SHIPPING DOCUMENT INDICATED BY
THE PARAMETER

DOCUMENT MANAGEMENT UNIT PUSHES THE SHIPPING DOCUMENT INTO THE IN QUEUE OF THE ENTRANCE NODE IN THE BP DEFINITION INDICATED BY THE NEXT BP ENTRANCE LOCATION

1250 ~/

NEXT SERVER		PREVIOUS SERVER	
DOCUMENT MANAGEMENT UNIT POPS UP A PREVIOUS BP EXIT LOCATION FROM THE STACK OF PREVIOUS BPS IN THE SHIPPING DOCUMENT	1305 ~	NETWORK CONTROL UNIT CALLS OUT THE RE- TURN FUNCTION IN THE DOCUMENT MANAGE- MENT UNIT BY GIVING THE DELIVERED SHIP- PING DOCUMENT AS A PARAMETER	
DOCUMENT MANAGEMENT UNIT SETS THE POPPED PREVIOUS BP CALL LOCATION IN THE SHIPPING DOCUMENT AS THE NEXT BP ENTRANCE LOCATION	1310	DOCUMENT MANAGEMENT UNIT TAKES OUT THE NEXT BP ENTRANCE LOCATION AND THE PREVIOUS BP EXIT LOCATION IN THE SHIPPING DOCUMENT INDICATED BY THE PARAMETER	
NODE NAME IN THE SHIPPING DOCUMENT AS A PREVIOUS BP EXIT LOCATION  DOCUMENT MANAGEMENT UNIT CALLS OUT A	1315	DOCUMENT MANAGEMENT UNIT CALLS OUT THE RETRIEVAL FUNCTION IN THE BP CONNEC- TION DATA MANAGEMENT UNIT BY GIVING THE NEXT BP DEFINITION NAME AND ENTRANCE NODE NAME, AND THE PREVIOUS BP DEFINI- TION NAME, EXIT NODE NAME AND SERVER NAME AS THE PARAMETERS	
DELIVERY FUNCTION IN THE NETWORK CON- TROL UNIT BY GIVING THE SHIPPING DOCU- MENT AS A PARAMETER	J	BP CONNECTION DATA MANAGEMENT UNIT RE-	
THE NETWORK CONTROLLER DELIVERS THE SHIPPING DOCUMENT TO THE SERVER MAN- AGING A NEXT BP CONFIRRING THE NEXT BP ENTRANCE LOCATION IN THE SHIPPING DOC- UMENT INDICATED BY THE PARAMETER	1325 ~	THE PREVIOUS BP LOCATION AND THE NEXT BP LOCATION HAS THE NEXT BP DEFINITION NAME AND ENTRANCE MODE NAME, AND THE PREVIOUS BP DEFINITION NAME, EXIT NODE NAME AND SERVER NAME OF THE PARAMETERS	
		BP CONNECTION DATA MANAGEMENT UNIT RETURNS TO THE COCUMENT MANAGEMENT UNIT.THE RETURN NODE NAME IN RETURN TABLE ENTRY OBTAINED AS THE RESULT OF THE RETRIEVAL	
		DOCUMENT MANAGEMENT UNIT ENTERS THE	

SHIPPING DOCUMENT INTO THE IN QUEUE OF

THE RETURN NODE INDICATED BY THE BP DEFINITION NAME IN THE NEXT BP ENTRANCE LOCATION IN THE SHIPPING DOCUMENT AND THE
RETRIEVED RETURN NODE NAME

1355

FIG. 14

SERVER NAME	1411		
BP DEFINITION NAME	1412		
EXIT NODE NAME	1413		
SERVER NAME	1421		
BP DEFINITION NAME	1422		
ENTRANCE NODE NAME	1423		
DOCUMENT DATA			
SERVER NAME 1441			
BP DEFINITION NAME 1442			
CALL NODE NAME 1443			
STACK OF PREVIOUS BPS			
	BP DEFINITION NAME EXIT NODE NAME SERVER NAME BP DEFINITION NAME ENTRANCE NODE NAME DOCUMENT DATA  VER NAME 1441 DEFINITION NAME 1442 L NODE NAME 1443		

1400 DATA STRUCTURE OF THE SHIPPING DOCUMENT

FIG. 15

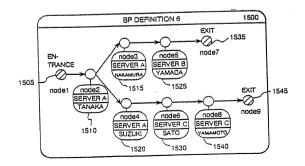


FIG. 16

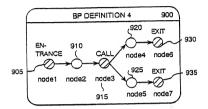


FIG. 17

